



## Group #5:

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# Motivation

- Sticking to exercise regime is difficult due to lack of time and low motivational levels.
- Music makes exercise interesting,
- Research shows that correct music can enhance the exercising experience, limit the feeling of compulsion and make the exercise productive.
- Songs not matching the taste of the user may spoil his mood and demotivate him from continuing.
- Exercise, when modified as a game to challenge friends and declare winners, can create additional drive.
- Analysing a workout is the most effective way of providing encouraging information.



# Contribution

- Detects user's steps
- Plays songs with equivalent bpm from user's youtube playlist.
- Provides Training templates for exercise.
- Provides Challenge mode to compete with friends.
- Provide weather forecast for best time and place.
- View Graphical representation to monitor exercise routines.



# Implementation

- Sign in with Google account
- Gets access to the user's youtube playlist details.
- The User begins his run.
- Sense user's steps per minute
- Calculate Beats per Minute (Bpm) of the songs via *Echonest API*
- Song with matching bpm is chosen from the user's Youtube account.
- User can switch between songs.



## Continued...

- User can challenge other app users to a Run
- The selected opponent/s are notified when user sends a challenge. The opponent can choose to accept/decline the challenge.
- Training templates for different levels of exercise.
- Graphical representation of data to track exercise details.
- Visualization of previous accomplishments over past week and month




















































# Database

- Database is built on a public server, thus it work for everyone.
- It is dynamically populated when the App Runs.
- It is Built is MySQL
- We have used pHpAdmin .
- The server scripting is done by the .php files
- The .php files are called from the Android Studio through the URL
- The database connection is made in the .php files.
- The Result is JASON encoded.
- Parameters are passed and retrieved from the queries in the php files.

Server: localhost ► Database: a2166115\_bmrdb ► Table: User

[Browse](#) [Structure](#) [SQL](#) [Search](#) [Insert](#) [Export](#) [Import](#) [Operations](#) [Empty](#) [Drop](#)

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	<b>id</b>	varchar(30)	latin1_swedish_ci		No			      
<input type="checkbox"/>	<b>email</b>	varchar(30)	latin1_swedish_ci		No			      
<input type="checkbox"/>	<b>name</b>	varchar(30)	latin1_swedish_ci		No			      
<input type="checkbox"/>	<b>age</b>	int(11)			No			      
<input type="checkbox"/>	<b>height</b>	int(11)			No			      
<input type="checkbox"/>	<b>weight</b>	double			No			      
<input type="checkbox"/>	<b>location</b>	varchar(30)	latin1_swedish_ci		No			      

 [Check All](#) / [Uncheck All](#) With selected:       

 [Print view](#)  [Propose table structure](#) 

 Add  field(s) ☒ At End of Table ☐ At Beginning of Table ☐ After  




































#### Indexes:

Keyname	Type	Cardinality	Action	Field
<b>PRIMARY</b>	PRIMARY	5	 	id

Create an index on  columns

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[Search](#)
[Insert](#)
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[Operations](#)
[Empty](#)
[Drop](#)

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	<u>youtube_id</u>	varchar(30)	latin1_swedish_ci		No			     
<input type="checkbox"/>	title	varchar(50)	utf8_general_ci		No			     
<input type="checkbox"/>	artist	varchar(50)	latin1_swedish_ci		No			     
<input type="checkbox"/>	tempo	double			No			     
<input type="checkbox"/>	liveness	double			No			     
<input type="checkbox"/>	duration	double			No			     
<input type="checkbox"/>	energy	double			No			     
<input type="checkbox"/>	danceability	double			No			     

 Check All / Uncheck All With selected:      

[Print view](#)
[Propose table structure](#)

 Add  field(s)
 ☒ At End of Table
 ☐ At Beginning of Table
 ☐ After  











































Indexes: ?				
Keyname	Type	Cardinality	Action	Field
PRIMARY	PRIMARY	26	 	youtube_id
Create an index on <input type="text" value="1"/> columns <input type="button" value="Go"/>				

[Open new phpMyAdmin window](#)




Server: localhost ▶ Database: a2166115\_bmrdb ▶ Table: RunInfo

[Browse](#) [Structure](#) [SQL](#) [Search](#) [Insert](#) [Export](#) [Import](#) [Operations](#) [Empty](#) [Drop](#)

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	<u>user_id</u>	varchar(30)	latin1_swedish_ci		No			     
<input type="checkbox"/>	<u>datetime</u>	datetime			No			     
<input type="checkbox"/>	<u>distance</u>	double			No			     
<input type="checkbox"/>	<u>duration</u>	double			No			     
<input type="checkbox"/>	<u>steps</u>	int(11)			No			     
<input type="checkbox"/>	<u>calories</u>	double			No			     
<input type="checkbox"/>	<u>location</u>	varchar(30)	latin1_swedish_ci		No			     

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 [Print view](#)  [Propose table structure?](#)

 Add  field(s) ☒ At End of Table ☐ At Beginning of Table ☐ After  

Indexes: 				
Keyname	Type	Cardinality	Action	Field
PRIMARY	PRIMARY	32	 	user_id datetime
Create an index on <input type="text" value="1"/> columns <input type="button" value="Go"/>				

 [Open new phpMyAdmin window](#)

Browse

Structure

SQL

Search

Insert






















Export

Import

Operations

Empty

Drop

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	youtube_id	varchar(30)	latin1_swedish_ci		No			      
<input type="checkbox"/>	user_id	varchar(30)	latin1_swedish_ci		No			      
<input type="checkbox"/>	timestamp	timestamp		ON UPDATE CURRENT_TIMESTAMP	No	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP	      

 Check All / Uncheck All With selected:



Print view


Propose table structure

Add  field(s)

☒ At End of Table ☐ At Beginning of Table ☐ After



Indexes: ?

















Keyname	Type	Cardinality	Action	Field
PRIMARY	PRIMARY	34	 	youtube_id user_id
user_id_constraint	INDEX	3	 	user_id

Create an index on  columns

Open new phpMyAdmin window

Server: localhost Database: a2166115\_bmrdb Table: Challenges

Browse Structure SQL Search Insert Export Import Operations Empty Drop





	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	sender_id	varchar(30)	latin1_swedish_ci		No			     
<input type="checkbox"/>	receiver_id	varchar(30)	latin1_swedish_ci		No			     
<input type="checkbox"/>	datetime	datetime			No			     
<input type="checkbox"/>	status	varchar(30)	latin1_swedish_ci		No			     

 Check All / Uncheck All With selected:      

Print view  Propose table structure?

Add  field(s) ☒ At End of Table ☐ At Beginning of Table ☐ After  

#### Indexes: ?

Keyname	Type	Cardinality	Action	Field
PRIMARY	PRIMARY	19	 	sender_id receiver_id datetime
receiver_id_constraint	INDEX	2	 	receiver_id

Create an index on  columns

 Open new phpMyAdmin window